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20 October 2011



Sphere Medical Holding PLC

("Sphere" or the "Company")

INTENTION TO RAISE UP TO £15M AND FLOAT ON AIM

~ Poised to revolutionise monitoring within intensive care diagnostics ~

Sphere (Cambridge, UK), a leading developer of innovative patient monitoring solutions for the critical care setting, is pleased to announce its intention to proceed with an institutional placing of new ordinary shares and an application for the admission of its ordinary share capital to trading on AIM, a market operated by the London Stock Exchange.

Sphere is proposing to raise gross proceeds up to £15 million by way of a placing to institutional and other investors.

Key Highlights

- Sphere is a UK based (Cambridge, UK) medical device company completing the development of a range of monitoring products designed to provide significant improvements in patient care in a number of hospital specialities, focusing initially on critical care
- Sphere's lead product, Proxima, based on the Company's patented microanalyser platform technology, is a patient-attached disposable silicon diagnostic microchip that enables near 'real-time' monitoring of the patient's arterial blood at the patient's bedside
- Sphere received FDA 510(k) certification for its Proxima Generation 1 device incorporating the microanalyser platform technology in March 2011 and has also received EU CE Marking. This Proxima Generation 1 device is expected to act as the predicate device for future generations of Proxima devices
- The Company has undertaken extensive trials of its Proxima Generation 2 patient attached device as a precursor to a clinical trial currently being conducted in West Suffolk Hospital and University Hospitals Birmingham, one of the largest ICU centres in Europe. This trial is expected to complete shortly and the results from this trial are expected to be used for EU CE Mark certification and for the submission of a FDA 510(k) application by the end of 2011
- Sphere's principal route to commercialisation is expected to be through partnerships with market leading companies which already have significant market share in relevant end markets. Edwards Lifesciences Corporation, a leading cardiac and critical care company, made an investment of £2 million in the Company in 2010. Sphere has a signed development and commercialisation agreement with a leading heart-lung bypass company, Sorin Group Italia S.r.l., who have also invested £0.25 million in the Company and has been working with Sphere to develop a continuous

blood monitoring product for use in cardiopulmonary surgery. Siemens Technology Accelerator GmbH a founder of Sphere, also retains an equity stake and has continued to invest in the Company in recent fund raisings

- Sphere's patent portfolio currently consists of 27 patent families and has intellectual property in the form of manufacturing processes that are kept as trade secrets
- Sphere employs 44 staff in the areas of research and development, product development, sales and marketing and management and operations

Overview of Sphere's Products

Proxima

- Proxima, Sphere's lead diagnostic device, is a patient-attached dedicated arterial blood analyser for use in the Intensive Care Units (ICU) and Operating Rooms (OR) of hospitals. Proxima is a disposable multi-parameter microanalyser designed to integrate into the existing arterial line of a patient and give near 'real time' bed-side measurement of blood gases and analytes including pH, pCO₂, pO₂ and K⁺
- The Proxima Generation 1 device which has EU CE Mark and received FDA 510(k) approval in March 2011, is expected to act as the predicate device for the Proxima Generation 2 device which is expected to be commercially available following regulatory approvals which are expected by December 2011 for the EU CE Mark and from Q3 2012 following a FDA 510(k) submission by December 2011
- Proxima is being positioned to address a very large market. Arterial blood gas testing in critical care settings is a large and established market and is a standard of care in a number of situations
- Each year an estimated 340 million blood gas and electrolyte tests are carried out globally and the current market size for equipment and consumables is estimated at \$1.2 billion. The Company estimates that 240 million of these tests are carried out on patients in the ICU and OR with an arterial line in place. On average, ICU patients stay for around three days and the Company estimates that around 20 blood measurements are taken during that time period. The Proxima Generation 2 device is fitted into the patient's arterial line and the Company estimates that there are 12 million arterial lines placed world wide each year
- The Proxima Generation 2 device is expected to have a number of key advantages including, ease of use, rapid results, equivalent accuracy to the "gold standard" laboratory bench-top analysers, as well as significant cost savings

Cardiopulmonary Bypass

- Sphere's cardiopulmonary bypass in-line blood monitor is in late stage development to provide the continuous near real time monitoring of blood circulating through the bypass circuit in heart-lung machines. The device measures pH, pCO₂, pO₂, K⁺, temperature, oxygen saturation and haematocrit continuously
- The Company intends to submit an EU CE Mark application in Q1 2012 and a FDA 510(k) submission in Q2 2012 ahead of anticipated commercialisation in H2 2012

Pelorus 1000

- Sphere has developed what it believes to be the only commercially available device for the near real time measurement of propofol, one of the world's most widely used intravenous anaesthetic,

used for the induction and maintenance of general anaesthesia in the OR and general sedation in the ICU

- The Pelorus 1000 has received EU CE Marking for research use. The Company has already achieved the sale of a Pelorus 1000 to a Japanese research institution and also consumables to a range of customers

Funding Highlights and Use of Placing Proceeds

Sphere intends to raise up to £15 million by way of a placing of ordinary shares to institutional and other investors.

Sphere expects to be EIS and VCT qualifying and to use the net proceeds of the placing to:

- Fund the continued development, regulatory approvals and commercialisation of the next generations of its Proxima devices as well as the cardiopulmonary bypass device and its Pelorus 1000 propofol device
- Invest in business development and marketing activities
- Investing in its Harston (Cambridge, UK) manufacturing and operations to support the anticipated growth from the commercialisation of its products
- Provide ongoing working capital as the Company transitions from research and development to a more commercially focused group

Board and Management

Sphere's Board immediately following Admission is expected to comprise:

- **Non-Executive Chairman** - Dr Anthony Martin (57) has over 25 years of executive and non-executive experience in the research products, diagnostics and biotechnology industries. Dr Martin is also Chairman of AIM-quoted Immunodiagnostic Systems Holdings plc and a non-executive director of Abcam plc
- **Chief Executive Officer** – Dr Stuart Hendry (48) has over 20 years' experience in the medical device industry and founded Sphere in 2002. Dr Hendry has previously held positions with Generics Group plc, PowderJect plc, Diametrics Inc. and Pfizer Hospital Products
- **Chief Financial Officer** – Matthew Hall (51) worked at IS Pharma plc from early 2007, initially as its financial adviser and then from January 2009 as CFO. Prior to that Mr Hall worked as a corporate finance adviser at Hill Samuel, Close Brothers and Noble Group
- **Non-Executive Director** – John Gregory (63) has extensive experience as an AIM non-executive director. Until recently Mr Gregory was Chairman of AIM-listed Sinclair IS Pharma plc and before that the Chairman of AIM-listed IS Pharma plc. Mr Gregory is Chairman of Foresight VCT plc and a non-executive of a number of private companies
- **Non-Executive Director** – Stephen H. Mahle (65) is the former Executive Vice President of Medtronic Inc, one of the world's largest medical device companies before he retired in September 2009 after 37 years. Mr Mahle led Medtronic's largest division as President of the Pacing Business and subsequently as President of CRDM during which time revenues grew from \$800K to \$4.8 billion

Sphere has a highly experienced and committed team covering all aspects of the business, including management, research and development, manufacturing, operations, business development and finance. Many of the staff have been with the Company for a number of years and have shown their commitment by investing in the Company.

It is expected that Admission will take place before the end of November 2011.

Peel Hunt LLP has been appointed as Nominated Adviser and Broker to the Company.

On the plans for flotation, Chief Executive Officer, Dr Stuart Hendry, said:

"It is an exciting time for Sphere. With almost 10 years of development accomplished, we believe we are now in a position with our leading device, Proxima, to achieve a key milestone with its commercial launch in 2012. Similarly, there are a number of further products utilising our core microanalyser technology, specifically, our cardiopulmonary bypass monitor, which is expected to achieve commercial milestones in 2012.

An AIM listing is an important step in our continued growth and our ambitions to become a leading player within the critical care diagnostic market."

Ends

For more information on Sphere Medical, please visit www.spheremedical.com, or contact:

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Technical Glossary

"Haematocrit"	a measure of the percentage of red blood cells to the total blood volume
"K ⁺ "	potassium ion
"OR"	operating room
"pCO ₂ "	a measure of the partial pressure of carbon dioxide
"pH"	a measure of the acidity or basicity of an aqueous solution
"pO ₂ "	a measure of the partial pressure of oxygen

“510(k) certification”	certification issued by the FDA and required for products placed on the market in the US which ensures that the product conforms with the essential requirements of the applicable US laws
“Arterial Blood Gas testing” or “ABG testing”	arterial blood gas is a blood test performed using blood from an artery
“CE Marking”	European Conformity Marking which is a mandatory conformity mark for products placed on the market in the European Economic Area which ensures that the product conforms with the essential requirements of the applicable EC directives
“ICU”	intensive care unit

No offer or invitation to purchase or subscribe for shares is being made at this time. Any such offer or invitation will be made solely in or by reference to the Admission Document to be published in due course and any acquisition shares in the Company should be made only on the basis of the information contained in the Admission Document.

This press release, for which the directors of the Company are solely responsible, has been approved by Peel Hunt LLP solely for the purpose of section 21 of the Financial Services and Markets Act 2000.

Peel Hunt LLP, which is authorised and regulated in the United Kingdom by the Financial Services Authority, is acting exclusively for the Company as Nominated Adviser and broker and for no-one else in relation to the flotation. Peel Hunt LLP will not regard any other person (whether or not in receipt of this press release) as its client in relation to the flotation and will not be responsible to anyone other than the Company for providing the protections afforded to clients of Peel Hunt LLP or for providing any advice in relation to the flotation.

Cautionary note on forward looking statements

This announcement contains certain forward looking statements relating to the Company’s future prospects, developments and business strategies. Forward looking statements are identified by their use of terms and phrases such as “targets” “estimates”, “envisages”, “believes”, “expects”, “aims”, “intends”, “plans”, “will”, “may”, “anticipates”, “would”, “could” or similar expressions or the negative of those, variations or comparable expressions, including references to assumptions. The forward looking statements in this announcement are based on current expectations and are subject to risks and uncertainties which could cause actual results to differ materially from those expressed or implied by those statements. Potential investors should not place any reliance on forward looking statements. These forward looking statements relate only to the position as at the date of this announcement. The Company does not undertake any obligation to update forward looking statements, other than as required by the AIM Rules for Companies or by the rules of any other applicable securities regulatory authority, whether as a result of the information, future events or otherwise.